DESCRIPTIONS OF NEW GENERA AND SPECIES OF AUSTRALIAN LEPIDOPTERA.

By Oswald B. Lower, F.E.S. (Lond.), &c.

[Read June 2, 1903.]

BOMBYCINA.

LASIOCAMPIDÆ.

OPSIRRHINA CYCLOMELA, n. sp.

Male and female, 60-120 mm. Head, face, thorax, and legs deep mahogany-red, all tarsi suffusedly ringed with dull ochreous-whitish, posterior tibiæ ochreous. Antennæ fuscous, pectinations ochreous. Abdomen yellow above, with broad black segmental bands, beneath mahogany-red. Forewings elongate, triangular, termen obliquely rounded; deep mahogany-red, more or less irrorated with dull whitish scales. especially in female; four obscure, similar dull fuscous moderate, curved, fasciæ; first from one-sixth costa to about one-fourth innermargin; second parallel beyond; third from costa in middle to middle of innermargin; fourth parallel beyond; a curved row of more or less connected fuscous spots from costa at four-fifths to anal angle; a dull fuscous discal spot; all these markings sometimes absent, especially in female; cilia mahogany-red. Hindwings with termen strongly rounded; deep mahogany-red, strongly mixed with yellowish along innermargin and at base; lines as in forewings, but first two hardly traceable; cilia as in forewings.

This fine insect is apparently undescribed, and at Dr. Turner's suggestion I am doing so. The female is a very heavily built insect and much liable to become greasy.

Cooktown and Duaringa, Queensland; several specimens

from late Mr. G. Barnard taken in March

GEOMETRINA, HYDRIOMENIADÆ.

Нуруспора, п., д.

Face with small cone of scales. Palpi short, porrected. Antennæ in male bipectinated throughout. Posterior tibiæ with all spurs present. Forewings with areole double; 12

free, vein 6 sometimes out of 9 Hindwings with patch of modified yellow scales; 6 and 7 stalked.

Type, delotis, Low.

Somewhat allied to *Xanthorhæ*, Hb., on the one hand, but with some reversionary tendency to *Melitulias*, Meyr.

HYPYCNOPA DELOTIS, n. sp.

Male and female, 23-25 mm. Head, antennæ, thorax, legs and abdomen ashy-grey-whitish. Antennal pectinations at greatest length 6, abdomen banded with blackish, tibiæ and tarsi obscurely ringed with whitish. Forewings elongate, triangular, termen entire, oblique; ashy-grey-whitish, finely strigulated throughout with transverse blackish lines; markings black; a fine curved transverse line near; edges of median band limited by fine lines; anterior from one-third costa to one-third innermargin, gently curved, anteriorly edged by a dull whitish band, containing a fine line of fuscous throughout; posterior edge from two-thirds costa to two-thirds innermargin, waved throughout, with a moderate bidentate projection in middle, sinuate above and below this, and with a slight indentation on fold; a transverse line, thicker on lower half, from costa in middle of median band, thence inwardly oblique to innermargin and there coalescing with anterior edge of band, forming a thick streak, followed by a parallel line just beyond; a short oblique streak from just beneath apex and reaching a fine waved double subterminal line; a row of elongate black streaks along termen; cilia fuscous with a dark median line. Hindwings with termen very faintly waved; whitish fuscous, with faintly waved transverse fuscous lines; edges of median band only discernible on innermargin; a postmedian transverse fuscous line, followed by a parallel, but more waved fuscous line; an elongate patch of yellow scales below costa in middle, absent in female; cilia grevish-fuscous.

Recalls Phrissogonus insigillatus, Walk., especially the

female.

Broken Hill, New South Wales, male; Birchip, Victoria, female; both taken in April. The latter specimen taken by Mr. D. Goudie.

MESOPTILA ANTHRACIAS, Low.

(P. L. S., N.S.W., 1897, p. 12.)

I submitted a specimen of this insect to Sir Geo. Hampson, who informs me that it is not referable to the *Geometrina*, but to the *Noctuina* in the genus *Raparna*, so that the remarks in reference thereto may be treated as non-existent. It will now stand as:—

RAPARNA ANTHRACIAS,

and is referable to the Hypeninæ.

XANTHORHŒ HYPOGRAMMA, n. sp.

Male, 24 mm. Head, palpi, antennæ, thorax, and abdomen ochreous, palpi, fuscous on sides and above on basal half, antennal pectinations (?). Abdomen with pairs of fuscous spots on each segment. Legs ochreous, anterior and middle Forewings elongate, triangular, pair banded with fuscous. termen rounded, faintly waved; pale ochreous, with fuscous markings; costa shortly strigulated from base to anterior edge of median band; a curved line from one-sixth costa to onesixth innermargin; basal area fuscous-tinged; median band broad, anterior edge from one-third costa to one-third innermargin, gently curved inwards throughout, followed by two parallel lines; most distinct on margins; posterior edge from costa beyond two-thirds to innermargin beyond two-thirds, slightly angulated just below costa, and with a prominent median projection, somewhat sinuate above and below this. anteriorly edged throughout by a moderate, thick parallel shade, which is again edged anteriorly by a fine parallel line, leaving middle of band clear ground color; a well defined curved discal spot; a suffused spot on costa near apex; an irregular oblique streak from termen just below apex, continued as a short subterminal band to nearly half across wing, space between posterior edge of median band and termen marked with fine transverse pencillings of light fuscous; a series of dots along termen, arranged in pairs; cilia ochrecus. Hindwings with termen faintly waved; pale ochreous; a well defined blackish discal dot; median fascia blackish. anterior edge suffused, posterior edge well defined, gently curved, somewhat prominent in middle; two or three obscure short parallel lines of fuscous above anal angle; dots along termen and cilia as in forewings. Underside of hindwings pale ochreous, markings of upperside reproduced, but much more distinct; discal dot connected with base by a black bar; parallel lines above anal angle forming a subterminal band.

The antennæ being imperfect render the position of this species uncertain; it is very unlike any other known to me.

Bairnsdale, Victoria; one specimen in February.

MONOCTENIADÆ.

TAXEOTIS DASYZONA, n. sp.

Female, 26 mm. Head, thorax, abdomen, and legs ochreous-grey. Face and palpi blackish ferruginous, palpi

sharply white on basal half beneath. Antennæ ochreous. Forewings elongate, triangular, termen faintly bowed, slightly sinuate beneath apex; 12 free; ochreous-grey, with fuscous markings; a small spot below costa at one-fourth, a second above innermargin at one-third, and a third midway between; a moderate, round, pale centred discal spot; a moderately thick fuscous shade from costa at three-fourths to innermargin at three-fourths, somewhat sinuate inwards on lower half; a row of dots along termen; cilia ochreous-fuscous. Hindwings with color, markings, and cilia as in forewings, but first three dots absent and fuscous shade nearly straight.

Nearest anthracopa, Meyr., but quite distinct by the neural

character and markings.

Hoyleton, South Australia; one specimen in December.

TAXEOTIS HOLOSCIA, n. sp.

Female, 24 mm. Head, thorax, and abdomen dark fuscous, somewhat leaden-tinged. Antennæ fuscous. Face and palpi deep blackish fuscous, base not white beneath. Legs dark Forewings elongate, triangular, termen gently rounded, faintly sinuate beneath apex; dark leaden-fuscous; 11 connected by bar with 12; an erect blackish mark on innermargin at one-third; a small spot on costa at one-fourth and another midway between, the three forming a somewhat curved series; a moderate fuscous discal spot; a row of somewhat connected small fuscous spots from costa at three-fourths. to innermargin at two-thirds, gently curved outwards on upper half; a fine fuscous line along termen, more or less interrupted into spots; cilia fuscous, darker on basal half, with a distinct grev parting line. Hindwings dark fuscous, minutely irrorated with black; two short blackish lines from innermargin before and beyond middle, the latter better developed; line along termen and cilia as in forewings.

Not unlike some forms of female intextata, but the different position of lines as well as the wholly dark palpi at once

separate it.

Brisbane, Queensland; one specimen in October.

TAXEOTIS XANTHOGRAMMA, n. sp.

Male, 26 mm. Head and thorax greyish-ochreous. Abdomen silvery-grey. Face and palpi dark fuscous, palpi 1½, not white beneath. Antennæ deeply dentate, ciliations 1. Legs fuscous. Forewings elongate, triangular, termen gently rounded; 12 connected by bar with 11; grey, with fine scattered blackish scales; a double black dot on innermargin at

one-third, a second on costa at one-third and a third midway between, first and third, anteriorly edged with ferruginous; an indistinct blackish discal spot; a series of fine black spots from costa at two-thirds, to innermargin at two-thirds, strongly curved outwards in middle and edged posteriorly from below costa to termination by a moderate, bright ochreous-ferruginous line; a subterminal row of blackish spots, obscure; a row of well defined black dots along termen; cilia grey. Hindwings dull silvery-grey, without markings; dots along termen and cilia as in forewings. Underside of both wings silvery-grey, without markings.

Probably nearest isophanes, Meyr., but differs by the ochreous markings and absence of markings beneath. I have two specimens from Melbourne which only differ in being duller colored; from phxopa, Low., it differs especially by the fuscous palpi and face.

Broken Hill, New South Wales; one specimen in October.

DARANTASIA PERICHROA, n. sp.

Male, 26 mm. Head, thorax, and abdomen greyish-fuscous, head and thorax sometimes reddish-tinged. Antennæ fuscous, ochreous on basal one-third. Palpi and face dark fuscous, nearly black, basal half of palpi beneath sharply white. Forewings elongate, triangular, costa gently arched, termen obliquely rounded; greyish-fuscous, minutely sprinkled with fuscous; costa rather broadly reddish and sometimes strigulated with blackish; markings blackish, obscure; a small spot on innermargin beyond one-third, a second above in middle; a small discal spot; a dot on innermargin at threefourths, and another on fold above; indications of a subterminal series of spots; a row of spots along termen; cilia greyish, mixed with fuscous. Hindwings pale silvery-grey; veins 6 and 7 sometimes from a point, separate, or stalked; a fuscous discal dot; dots along termen and cilia as in ferewings.

The variation of veins 6 and 7 of hindwings is unusual. The species has considerable superficial resemblance to some species of *Taxeotis*, notably *isophanes*, Meyr., but the antennæ indicate its correct position with certainty. I possess what may possibly be the female of this species; it is much smaller (20, mm.), yet the markings are nearly identical, including the reddish tinge of thorax, head, and costa; and the termen of forewings is nearly straight.

Stawell, Victoria; three specimens in September.

NEARCHA OXYPTERA, n. sp.

Male, 40 mm. Head, thorax, and abdomen greyish ochreous minutely irrorated with blackish scales. deep ferruginous, basal third whitish beneath. Anterior legs ochreous. (Middle and posterior pair broken.) Forewings elongate, triangular, termen bowed. gently waved, sinuate beneath apex, apex acute; vein 2 strongly curved and bent down so as to almost touch vein 1; dull ochreous, minutely irrorated throughout with fuscous; costal edge ochreous-ferruginous throughout; a black dot at base; indications of a curved series of black dots from onethird costa to one-third innermargin; a moderately large fuscous discal dot; a dull ferruginous shade, anteriorly edged by a series of obscure blackish spots, from costa at two-thirds to innermargin at two-thirds, gently curved outwards on upper half; an obscure transverse series of blackish subtriangular spots, more or less forming an interrupted shade; a row of black spots along termen; cilia ochreous-grey, becoming fuscous-tinged on basal half. Hindwings with termen hardly rounded, nearly straight, faintly waved; a moderate dark fuscous discal spot at one-third from base; ferruginous shade, subterminal markings, spots along termen and cilia as in forewings. Forewings beneath with a moderate tuft of curled hairs in cell; veins 2, 3, 4, and 5 somewhat raised and clothed with short hairs; spots along termen as above. Hindwings beneath with a large subcostal tuft of ochreous-grey hairs from base to one-fourth, becoming fuscous at posterior extremity. where they form a tuft; a large double patch of similar hairs in middle, and a ridge of ochreous hairs beneath, space between more or less hyaline; spots along termen as above.

Allied to buffalaria, Gn., but differs in shape of wing and especially by the tufts on underside of forewings. The curious formation of vein 2 and thickening on others mentioned are very noticeable points; it occurs in both forewings. It is highly probable that the posterior tibiæ will reveal addi-

tional peculiarities.

Illawarra, New South Wales; one specimen in November.

NEARCHA PYROSEMA, n. sp.

Male and female, 24-26 mm. Head and thorax pale greyish-ochreous, head more ochreous. Antennæ grey-whitish, pectinations blackish. Face and palpi ferruginous-blackish, palpi hardly 2, basal two-thirds beneath white. Abdomen pale greyish-ochreous, anterior segmental margins somewhat ochreous. Legs greyish-ochreous, posterior tibiæ dilated and

containing pencil of long black hairs. Forewings elongate, triangular, termen gently rounded, oblique; pale ochreousgrey, minutely irrorated throughout with blackish scales; a reddish spot on innermargin at one-third, with indications of one or two similar spots above; a moderately large black greyish-centred discal spot; a transverse series of light reddish-ferruginous spots from costa at three-fourths to innermargin at three-fourths, sometimes obsolete towards costa, most distinct on lower third and gently curved throughout; a pale fuscous parallel shade between spots and termen; a pale fuscous shade along termen; a row of black spots along termen; cilia greyish-ochreous. Hindwings with termen rounded; without tufts beneath; color, discal spots, and cilia as in forewings; other markings faintly indicated in female; strongly pronounced in male, but reddish markings become fuscous.

Probably between ophla, Swinh., and anemodes, Low. Derby, Western Australia; two specimens, in November: Also from Tennant's Creek. Central South Australia.

DICHROMODES ORTHOZONA, n. sp.

Head, palpi, and thorax Male and female, 24 mm. fuscous, thickly irrorated with whitish scales, palpi in male 2, in female 2½, beneath dark ferruginous fuscous, basal half Antennæ fuscous, pectinations nearly 6. Abdomen fuscous, thickly irrorated with whitish scales, especially beneath, basal, segment narrowly white. Legs fuscous, thickly irrorated with whitish scales, tibiæ and tarsi more or less ringed with ochreous-white. Forewings elongate, triangular, termen rounded, faintly waved; fuscous mixed with dark fuscous and irrorated with white; basal third ferruginousochreous; an obscure short ferruginous mark at base; a moderately broad fuscous-whitish median band, edges evenly waved; edged anteriorly by a moderately thick nearly straight ochreous-white line, containing a fine ferruginous median line throughout, from costa at one-third to innermargin at onethird, gently curved inwards; posteriorly by a similar nearly straight ferruginous centred line, somewhat dilated on costa, from costa at about two-thirds to innermargin at two-thirds; a large somewhat quadrate black discal spot on median band above middle, resting on an obscure bar of whitish fuscous; a similar bar along fold; the discal spot is edged above and below by an obscure streak of dull ochreous; subterminal line whitish, waved, forming a moderate projection above, below, and in middle, last more prominent; edged anteriorly throughout by a moderate, thick parallel fuscous shade, the posterior edge of which is parallel to limiting line of median band; a blackish line along termen; cilia whitish, mixed with fuscous and barred with blackish. Hindwings with termen rounded, hardly waved; fuscous; a faint darker discal dot; a darker curved postmedian line, followed by an obscure whitish parallel line; line along termen and cilia as in forewings.

Apparently nearest *compsotis*, Meyr., but apart from the longer antennal ciliations, it may be at once recognised by the almost straight limiting lines of median band, thus recalling *orthotis*. The palpi of male are distinctly shorter than

female.

Roeburne, Western Australia; two specimens in November.

DICHROMODES ARISTADELPHA, n. sp.

Male, 26 mm. Head and palpi whitish-grey, palpi 2½, beneath white, ferruginous on sides and with a small snow white subapical spot on terminal joint. Antennæ fuscous, Abdomen ashy-grey-whitish, with obscure pectinations $2\frac{1}{2}$. blackish marginal rings. Legs dark fuscous, irrorated with minute whitish scales, tibiæ and tarsi banded with ochreous. Forewings elongate, triangular, termen gently waved. rounded; ochreous, somewhat mixed with ferruginous-fuscous; a short black outwardly oblique line near base, hardly reaching innermargin; median band dark fuscous, well defined, limiting lines black; anterior edge from just beyond onefourth of costa to about middle of innermargin, strongly curved inwards on upper two-thirds, and with a sharp angulation above innermargin; edged anteriorly throughout by a narrow parallel ochreous-white line, which line is anteriorly edged by a suffused fuscous line; posterior edge from about two-thirds costa to two-thirds innermargin, sinuate inwards above and below middle, causing median third to become prominently rounded; a narrow parallel ochreous-white line immediately following; a fuscous-whitish quadrate discal spot, edged on either side with a black line; a thick black bar connecting margin of band below middle; subterminal cloudy, silverygrey, rather strongly sinuate inwards above and below middle, edged posteriorly by an irregular parallel ferruginous line; a shaply defined black spot resting on innermargin near anal angle, inclining to separate into 2 spots; a silvery-grey band along termen, anterior edge parallel to ferruginous line; a fine waved black line along termen; cilia grey-whitish, mixed with fuscous, terminal half grey, with fuscous bars, dividing line Hindwings with termen waved, rounded; dark

fuscous; a fuscous discal spot; a fine waved fuscous line from costa beyond middle to innermargin beyond middle, sharply indented in middle and becoming edged with whitish towards innermargin; a double black spot near anal angle; a narrow silvery-white mark below; line along termen as in forewings; cilia dark fuscous, terminal half grey, division distinct.

Very closely allied to partitaria, Walk., but differs by the totally different coloring and shape of first line besides other

details. It is a prettily marked species.

Henley Beach, South Australia; one specimen in September

Hypographa cyanorrhæa, n. sp.

Head, palpi, and thorax bluish-white, Male, 24 mm. fuscous tinged, face with a long bidentate projecting plate, projections acute, exposed, antennæ and legs fuscous. Forewings elongate, triangular, termen deeply waved on upper half, with a prominent projection in middle, sinuate inwards on lower half; fuscous; a very oblique moderately thick fuscous line from one-fourth innermargin to costa very near apex, wing between this and base fuscous, somewhat mixed with bluishwhite, and with fine oblique fuscous parallel lines on costal portion; posterior area of wing beyond thick fuscous line bluish-white, gradually shading into fuscous to termen, and with fine waved fuscous anterior lines, parallel to first; a black line along termen; cilia bluish-white, fuscous at base. Hindwings with termen as in forewings, but median projection less pronounced; 6 and 7 stalked; bluishwhite; basal one-third tinged with fuscous, limited by a fainter darker line; a faint fuscous discal dot; a fine waved fuscous line, nearly straight, beyond middle, followed by a moderate parallel fuscous shade; a broader shade along termen; cilia fuscous, with some whitish scales at base.

Distinct from the other described species by the bidentate frontal projection, arrangement of lines and small size.

Alice Springs, Central South Australia; one specimen in November.

GEOMETRIDÆ.

XENOCHLÆNA, n. g.

Face somewhat rounded. Palpi moderate, porrect, with closely appressed scales, terminal joint short. Antenne moderate, bipectinated to apex. Post tibiæ not dilated. Forewings with 6 out of 9 near base; 10 free, from base of 9; 11 rising separate, somewhat connected with 12 at costa. Hindwings 5 nearer 6 than 4; 6 and 7 stalked; 8 free, somewhat approximated to cell near base.

Type porphyropis, Lower. (P. L. S., N.S.W., 42, 1898.)

This genus is formed to receive the above. I formerly placed it in the genus Arrhodia, but it is properly referable to the $Geometrid\alpha$.

The original specimen is still unique.

SELIDOSEMIDÆ.

SCIOGLYPTIS TRISYNEURA, n. sp.

Male, 26 mm. Head, palpi, thorax, and abdomen greywhitish, thorax with moderate bifid posterior crest, face with obtuse horny projection. Palpi long, 2 densely haired beneath. Antennæ greyish, bipectinated pectinations 6 (apex Legs greyish-fuscous, posterior pair whitish, posterior tibiæ dilated enclosing tuft of hairs. Forewings elongate, triangular, termen obliquely and gently rounded; 10, 11, and 12 free, nearly parallel; grey-whitish, obscurely irrorated with fuscous; fovea well developed, somewhat striated beneath; markings fuscous, very obscure, linesscarcely traceable; first dentate, from costa at one-fourth to innermargin at one-fourth, dot like on margins; median line nearly straight, followed by a parallel line, more oblique, somewhat beyond; a distinct discal dot; a very dentate. oblique line from five-sixths costa to anal angle, emitting a streak from above middle to below apex; a row of dots along termen; cilia greyish. Hindwings with termen rounded; white on basal two-thirds, rest of wing light fuscous; a small fuscous discal spot; median shade faintly indicated, distinct on innermargin; an obscure waved subterminal line, distinct on innermargin; dots along termen and cilia as in forewings.

An obscure looking insect; the horny frontal prominence, crested thorax, neuration (which may vary) and dilated posterior tibiæ are, I hope, sufficient characters to recognise it. It is nearest *lithinopa*, Meyr. The antennæ are unfortunately damaged; the crested thorax, although not in accordance with the genus, are too trivial to separate the species generically, especially when the variations of neural characters of the genus are considered, consequently I prefer to place it here.

Arltunga, Central South Australia; one specimen in

November.

PACHYTYLA, n. g.

Face somewhat rounded, with appressed scales, palpi moderate, porrected, thickly scaled, terminal joint very short. Antennæ in male bipectinated to apex. Thorax not crested. Abdomen with lateral crests. Femora glabrous, posterior tibiæ strongly dilated, enclosing tuft of long hairs, posterior tarsi very short about half of tibiæ. Forewings with moderate fovea; 12 free, 10 and 11 stalked; 7 and 8 out of 9. Hindwings normal.

Probably nearest Selidosema, Hb., but the antennæ and legs are sufficient generic distinction.

Type doliopa, Low.

PACHYTYLA DOLIOPA, n. sp.

Head, face, and antennæ dark fuscous, Male, 30 mm. antennal pectional 3 at greatest length. Palpi ashy greywhitish, fuscous above. Thorax deep ferruginous-fuscous, collar broadly ashy-grey-whitish, division distinct. strongly margined laterally, dark fuscous, with suffused whitish segmental bands. Legs ashy-grey-fuscous, posterior tibiæ strongly dilated containing pencil of long white hairs, tarsi very short, less than one-half of tibiæ. Forewings elongate, triangular, termen gently and evenly waved, dark cinereousfuscous, obscurely mixed with ferruginous; fovea moderate; markings black, well defined; a fine inwardly oblique line close to base; a fine, somewhat waved line from one-third costa to one-third innermargin, slightly indented above middle; a similar line from near middle of costa to middle innermargin; a third similar line, less waved, from two-thirds costa to two-thirds innermargin; a strongly dentate line from three-fourths costa to innermargin before anal angle, edged anteriorly by a moderate shade of ferruginous throughout, dentations tending to be carried along veins, especially above and below middle; an inwardly oblique streak from just below apex; a waved line along termen; cilia ashy-grey-fuscous, with blackish bars at extremities of veins. Hindwings with termen waved; white tinged with fuscous; lines of forewings, except basal more or less indicated; a moderate fuscous band along termen, becoming narrowed towards anal angle; cilia white, barred with fuscous.

Very similar in general appearance to a small specimen of Stibaroma melanotoxa, Meyr.

Broken Hill, New South Wales; one specimen in June. I have seen a specimen from Brisbane, Queensland.

Angelia, n. g.

Face with horny projecting plate. Palpi moderate, porrected, rough scaled, terminal joint rather short. Antennæ in male bipectinated to apex. Thorax somewhat crested, rather hairy beneath. Femora glabrous, or slightly hairy.

Posterior tibiæ more or less dilated. Forewings in male with well developed fovea; 10 connected on anastomosing with 12 and 9, 11 rising out of 10 between connections. Hindwings normal.

Type tephrochroa, Low.

Allied to Amelora, Meyr., on the one hand, and Chlenias, Gn., on the other; differing from the former by the horny projecting plate of face and well marked fovea of forewings; which latter character also separates it from Chlenias.

I have dedicated the genus to my friends, Messrs. S. and F. Angel, in recognition of their enthusiastic work and continued

kindness.

ANGELIA TEPHROCHROA, n. sp.

Male, 38 mm. Head dull ochreous-whitish, face with moderate horny projection, rounded truncate. Palpi and antennæ fuscous, antennal pectinations at greatest length 6. Thorax light slaty-grey, finely irrorated with blackish. Abdomen and legs pale slaty grey. Forewings pale slaty-grey, finely irrorated throughout with blackish scales; fovea well developed, costal edge sometimes edged throughout narrowly with orange fuscous; a reddish-ferruginous line of about 5 dots, interrupted, from costa at one-third to innermargin at one-fourth; a similar colored dentate line from four-fifths costa to innermargin before anal angle, both lines sometimes absent; a large somewhat quadrate black discal spot; cilia greyish-ochreous. Hindwings ochreous-grey, finely irrorated with fuscous, except basal third; a moderate fuscous discal spot; cilia as in forewings.

Probably nearest *platydesma*, Lower. Broken Hill, New South Wales; two specimens in May.

Angelia platydesma, Lower.

(Amelora platydesma, Lower. T.R.S., S.A., 1901, 65.)

ANGELIA HETEROPA, Lower.

(Amelora heteropa, Lower. T.R.S., S.A., 1901, 64.)
I refer the two above species to this genus; the fovea is well developed in both.

Angelia callisarca, n. sp.

Male, 30 mm. Head and thorax fleshy-carmine, face with a prominent tridentate plate, median projection long, tolerably acute, thorax beneath tinged with fleshy carmine. Antennæ fuscous, pectinations at greatest length 6. Abdomen ochreous-grey. Palpi fuscous-grey. Legs fuscous, pos-

terior pair greyish-ochreous. Forewings elongate, triangular, costa gently arched, termen oblique, hardly bowed; bright fleshy carmine, with deep fuscous-carmine markings; fovea moderate; a narrow transverse fascia, from one-fourth costa to one-fourth innermargin, upper half outwardly oblique, thence strongly curved inwards below; a large discal spot; a moderate, slightly oblique, thick, strongly dentate line, posteriorly edged with obscure ochreous, from costa at about four-fifths to innermargin at three-fourths, gently curved inwards on lower half; an obscure line along termen; cilia fleshy-carmine. Hindwings with termen rounded; 6 and 7 from a point; fuscous-whitish, paler on basal half; discal dot and second line fuscous, marked as in forewings; cilia fleshy-carmine.

Allied to heteropa, but apart from the longer antennal pectinations, it is immediately recognisable by the curious tridentate horny plate of forehead, which in heteropa is broadly truncate.

Broken Hill, New South Wales; one specimen in April.

Paramelora, n. g.

Face nearly flat, hardly prominent. Palpi moderate, porrected, rough scaled, terminal joint very short. Antennæ in male bipectinated nearly to apex, last four apical joints dentate. Thorax slightly hairy beneath. Posterior tibiæ hardly dilated. Forewings in male with small fovea; 10 connected with 12 and 9; 11 absent (rarely present (?)); 12 sometimes free. Hindwings normal.

This genus is allied to the preceding, but differs by the flat face, neuration, &c. In one forewing of a female 11 runs out of 12 from just beneath costa, in the other wing of the same specimen it is absent, so that I consider it an accidental deformity occurring in the individual in question, as the other species have the neuration as mentioned, but vein 12 sometimes hardly touches 9.

Type zophodesma, Low.

PARAMELORA ZOPHODESMA, n. sp.

Male, 20-24 mm. Head and thorax cinereous-grey. Palpi whitish, fuscous beneath. Antennæ fuscous, pectinations at greatest length 6. Legs fuscous-grey. Abdomen greyish. Forewings elongate, triangular, termen gently rounded, oblique; fovea moderate; dull white, suffusedly mixed with blackish, and finely irrorated with fuscous, so as to appear ashy-grey-whitish; a moderate thick black streak from costa

at one-fourth to innermargin at one-third, angulated beneath costa, thence almost straight, edged anteriorly by its own width, with a moderately clear white space, sometimes absent; a moderately thick black streak from costa before three-fourths to innermargin at two-thirds angulated outwards in middle and edged as in first streak; ground-color between first and second black lines much darker, and with strong indications of a similar angulated streak in middle, in one specimen well developed; a thick blackish, nearly straight suffused subterminal band, posterior edge irregular, anterior parallel to edge of second whitish streak; a row of black dots along termen; cilia cinereous-fuscous. Hindwings with termen rounded: greyish, finely strigulated throughout with fuscous, more dense beyond middle; two or three obscure whitish teeth on innermargin towards anal angle; cilia as in forewings. Costa of forewings beneath ochreous.

Broken Hill, New South Wales; two specimens in October

and May.

PARAMELORA LYCHNOTA, Lower.

(Nanthorrhæ lychnota, Lower. P.L.S., N.S.W., 1900, 404) I refer this species to this genus; fovea well defined.

Rнунснорѕота, п. g.

Face with appressed scales. Palpi very long, with appressed scales, terminal joint concealed. Antennæ of male bipectinated to apex. Thorax smooth. Posterior tibiæ moderately dilated. Forewings without fovea; 7 and 8 out of 9, 10 out of 9; 11 connected with 9 at a point; 12 free; without fovea. Hindwings 5 absent, 6 and 7 separate; 8 closely approximated to cell in middle with a long pencil of hairs lying at base beneath.

A peculiar genus, not very near any other in the group, the long palpi and hairs on hindwings beneath are rather unusual characters. The single species bears considerable superficial resemblance to *Crunophila ramostriella*, Walk. (*Pyralidina*).

Type delogramma, Low.

Rhynchopsota delogramma, n. sp.

Male, 34 mm. Head and palpi white, palpi ochreous fuscous on sides. Thorax white, palagia and a longitudinal median streak fuscous-ochreous. Antennæ fuscous, pectinations 6 at greatest length. Abdomen whitish. Legs whitish. Forewings elongate, triangular, termen moderately rounded, oblique; ochreous-fuscous, with well defined whitish markings; ochreous-fuscous, with well-defined whitish markings;

a broad streak immediately beneath costa, attenuated posteriorly; a similar streak beneath first, only separated by a fine line of ground color, from one-third to termen, finely attenuated anteriorly, broadly dilated posteriorly and continued as fine streaks along veins to termen; a broad longitudinal streak in middle, becoming trifurcate posteriorly, first furcation emitted from lower edge in middle and continued along fold to termen; second similar at two-thirds; third on upper edge, both to termen; a fine line above innermargin throughout, connected at base with median streak; cilia fuscous, with whitish streaks at extremities of veins. Hindwings with termen faintly sinuate in middle; pale ochreous-whitish; a fuscous band along upper half of termen, more pronounced beneath; a moderately long pencil of ochreous hairs beneath, rising at base; cilia ochreous-whitish.

Hobart, Tasmania; one specimen in November.

GASTRINOPA, n. g.

Face rounded, somewhat prominent. Palpi moderate, densely scaled, terminal joint short. Antennæ of male bipectinated nearly to apex, apex simple. Thorax without crests (?), densely hairy beneath. Abdomen smooth. Femora glabrous, posterior tibiæ of male strongly dilated, containing pencil of hairs. Forewings without fovea; 12 free; 10 and 11 rising separate, thence anastomising on median third, thence separating; 10 slightly connected with 9. Hindwings normal.

Differs from *Gastrina*, Gn., to which the species has remarkable superficial resemblance by the neuration and abdomen. The thorax is somewhat denuded, consequently I am unable to decide if the crest is present or not.

Type xylistis, Low.

GASTRINOPA XYLISTIS, n. sp.

Male and female, 36-38 mm. Head, palpi, antennæ, thorax, and abdomen dark ferruginous-fuscous. Antennal pectinations of male about 2½. Legs grey-whitish, thickly irrorated with ferruginous-fuscous. Forewings elongate, triangular, termen waved, rounded; ferruginous-fuscous, finely strigulated with transverse blackish markings; markings black; a gently curved line from one-third costa to one-third innermargin, faintly angulated above innermargin; a gently waved line from costa before three-fourths to innermargin at two-thirds, moderately curved inwards on lower half; ground color between first and second lines more blackish; an indistinct

discal dot followed by a patch of pale ochreous, anterior to second line; a fine waved line along termen; cilia fuscous. Hindwings with termen strongly waved; dull whitish finely strigulated with fuscous; especially on innermargin; a fuscous dot; a broad ferruginous-fuscous band along termen finely strigulated with blackish, paler on upper edge; line along termen as in forewings; cilia greyish, with a fuscous line.

Blackwood, South Australia; two specimens in October.

AMPHICROSSA HEMADELPHA, Lower.

I have recently obtained a single female specimen of this species. It only differs from the opposite sex as follows:—Antennæ dentate, strongly ciliated; hindwings more fuscous. The ciliated antennæ is a curious character shared by many species of *Chlenias*, Gn., and is a useful guide in recognising the different species. The insect formerly doubtfully described as the female of *hemadel pha*, is unquestionably the female of *Chlenias serina*, Lower, which, although very similar, and indeed could easily be mistaken for it, is immediately separated by the simple antennæ.

Broken Hill, New South Wales; one specimen in April.

TINEINA.

XYLORYCTIDÆ.

CRYPTOPHAGA MELANOSCIA, n. sp.

Male and female, 40-50 mm. Head, palpi, thorax, and legs ashy-grey-whitish antennæ white, pectinations 5, orange yel-Abdomen greyish, segmental margins dull orange; second broadly dull orange. Forewings elongate, moderate, costa in male nearly straight, in female arched, termen obliquely rounded; 2 from about two-thirds, 11 from middle, ashy-grey-whitish, finely irrorated throughout with short black scales; markings black; a short streak from costa near base to lower margin of cell, angulated in middle; a short thick mark in cell at one-third; a second, similar at end of cell; lower margin of cell outlined in black; from first mark proceeds a fine line to two-thirds of costa; veins towards termen more or less outlined with black, becoming very pronounced in middle of veins 5 and 6; 5 or 6 dull whitish spots, between middle of costa and apex, separated by dull fuscous marks: cilia ashy-grev-whitish chequered with black. with termen rounded, in male somewhat sinuate before anai angle; grevish-fuscous, becoming lighter on basal half; cilia grevish.

Intermediate in form between *irrorata*, Lew., and *leucadel pha*, Meyr., differing especially from the former by the hindwings and from both by the well defined blackish markings of forewings.

Birchip, Victoria; two specimens received from Mr. D. Goudie, who bred the species from Casuarina, sp., in October.

CRYPTOPHAGA DIPLOSEMA, n. sp.

Male and female, 40-50 mm. Head, thorax, and palpi fleshy white, thorax on posterior two-thirds reddish-ochreous. Antennæ white, pectinations 4, ochreous. Legs fleshy red, hairs of posterior pair orange. Abdomen orange, beneath Forewings elongate, moderate, costa arched, fleshy red. rather strongly in female, termen obliquely rounded, 2 from three-fourths, 3, 4, and 5 closely approximated at base; 4 and 5 stalked in male; reddish-ochreous, much paler in male; costa moderately pale fleshy white, from base to two-thirds, broadest on basal portion; a deep red somewhat quadrate patch on innermargin at one-sixth, reaching half across wing; a similar patch at about middle; a thick, deep red streak from upper edge of first spot, longitudinally continued to beyond second spot; markings very obscure in female; cilia deep Hindwings and cilia orange.

This insect has stood in my collection for some years as phæthontia, Meyr., but, having received a male from Mr. Dodd, of Townsville, Queensland, I consider it distinct from that species. It differs by the orange abdomen and hindwings, besides the other details. It has considerable resemblance to rubescens, Lew., but the strongly arched costa, rounded termen, and shorter antennal pectinations are sufficient to distinguish

it from that species.

Duaringa, female; Townsville, male (Dodd), Queensland, in November and December two specimens.

PROCOMETIS TETRASPORA, n. sp.

Male and female, 24 mm. Head, palpi, antennæ, and thorax ashy-grey-whitish, second joint of palpi fuscous externally except apex. Legs ashy-grey-whitish, anterior and middle tibiæ and 'tarsi dark fuscous, ringed with whitish. Abdomen dull reddish ochreous, with silvery-grey segmental margins. Forewings elongate, moderate, costa gently arched, termen obliquely rounded; 7 to apex or immediately above; ashy-grey-whitish; costal edge narrowly whitish on posterior half, and streaked with fine inwardly oblique fuscous marks; a fine white streak along fold from base to anal angle, less defined in male; a fuscous spot in disc at one-third; a second

obliquely below and beyond; and a third at posterior end of cell, connected with first by a white streak; indications of a fourth below third; cilia cinereous-grey, terminal half grey. Hindwings light fuscous; 3 and 4 from a point; 6 and 7 from a point, hardly short stalked; cilia whitish grey in female, darker in male, both sexes with fuscous subbasal line.

Not very near any other described species, but probably nearest monocalama, Meyr. It has a striking resemblance to Hypertricha ephelota, Meyr., but the palpi and presence of

vein 8 of forewings are distinct.

Melbourne, Victoria; two specimens in March.

PROCOMETIS PERISCIA, n. sp.

Male, 16 mm. Head, palpi, antennæ, thorax, and legs ashygrey-whitish, palpi infuscated on second joint externally, thorax with 2 or 3 obscure whitish longitudinal streaks, patagia whitish. Forewings elongate, moderate, costa gently arched, termen obliquely rounded; 7 to slightly above apex; dark fuscous, more or less minutely irrorated with fine whitish scales; a fine white line along fold, from base to anal angle; a fine white line in middle of wing, from near base to near base to near three-fourths, attenuated anteriorly and edged above with a fine black line; veins towards termen more or less outlined with blackish; cilia ashy-grey-fuscous. Hindwings with veins 3 and 4 from a point; 6 and 7 short stalked; rather dark fuscous; cilia greyish with a fuscous basal line.

Melbourne, Victoria; one specimen in March.

Macrozygona, n. g.

Head smooth, antennæ moderate, in male filiform, simple, basal joint moderate, without pecten. Labial palpi long, curved, ascending, terminal joint nearly as long as second. Thorax smooth, abdomen moderate. Posterior tibiæ rough haired above. Forewings with vein 2 from four-fifths, 3 from angle, 7 absent, coincident with 8. Hindwings with hairs of costa moderately developed beneath; 3 and 4 very short stalked; 6 and 7 stalked.

A connecting link between *Phylomyctis* and *Hypertricha*, but most allied to the former, from which it differs by the palpi of male, and stalking of veins 6 and 7 of forewings.

MACROZYGONA MICROTOMA, n. sp.

Male, 16 mm. Head whitish, face white. Palpi, antennæ, and thorax ochreous fuscous, palpi white on lower two-thirds of second joint externally. Antennæ whitish on basal one-third. Legs white, fuscous above. Abdomen greyish-

ochreous, white beneath. Forewings elongate, moderate, costa gently arched, termen obliquely rounded; ochreous-fuscous; a white costal streak from near base to three-fourths, attenuated at extremities; a rather broad irregular white streak along fold, becoming somewhat blotch-like at posterior extremity and continued to anal angle, where it is constricted; a suffused whitish spot at apex; cilia ochreous fuscous. Hindwings light ochreous-fuscous, somewhat shining; cilia grey, with fuscous parting line.

Melbourne, Victoria; one specimen in March.

HYPERTRICHA EPHELOTA, Meyr.

I have received females of this species, which measure 40 mm. in expanse. It differs very little from the male as regards markings and color, excepting that the whitish streak of forewings is less defined; in fact, all the markings of the forewings are suffused through the blackish coloring. The hindwings beneath are without any costal hairs (in the male they are well developed), and veins 3 and 4 of the hindwings are connate or nearly separate at origin in two specimens; and in one specimen actually stalked, so that in determining the genus this peculiar irregularity should not be lost sight of. The terminal joint of the palpi is similar to male—that is, one-fourth of second joint.